

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-167. (Canceled)

168. (New) An isolated polynucleotide encoding a polypeptide comprising an amino acid sequence having at least about 95% sequence identity to an amino acid sequence of SEQ ID NO: 2.

169. (New) The isolated polynucleotide of claim 168, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 2.

170. (New) The isolated polynucleotide of claim 168 comprising a polynucleotide sequence of SEQ ID NO: 58.

171. (New) The isolated polynucleotide of claim 168, wherein the polypeptide has cyclin-dependent kinase activity.

172. (New) A recombinant polynucleotide comprising a promoter sequence operably linked to the polynucleotide of claim 168.

173. (New) An isolated cell transformed with the recombinant polynucleotide of claim 172.

174. (New) A method of producing the polypeptide encoded by the polynucleotide of claim 168, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprise a promoter sequence operably linked to the polynucleotide of claim 168, and
- b) recovering the polypeptide so expressed.

175. (New) The method of claim 174, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 2.

176. (New) The method of claim 174, wherein the polynucleotide comprises the polynucleotide sequence of SEQ ID NO: 58.

177. (New) An isolated polypeptide comprising an amino acid sequence having at least about 95% sequence identity to an amino acid sequence of SEQ ID NO: 2.

178. (New) The isolated polypeptide of claim 177 comprising the amino acid sequence of SEQ ID NO: 2.

179. (New) The isolated polypeptide of claim 177, wherein the polypeptide has cyclin-dependent kinase activity.

180. (New) A composition comprising the polynucleotide of claim 177 and a pharmaceutically acceptable excipient.

181. (New) A method of screening a compound for effectiveness as an agonist of the polypeptide of claim 177, the method comprising:

- a) exposing a sample comprising the polypeptide of claim 177 to the compound, and
- b) detecting agonist activity in the sample.

182. (New) A method of screening a compound for effectiveness as an antagonist of the polypeptide of claim 177, the method comprising:

- a) exposing a sample comprising the polypeptide of claim 177 to the compound, and
- b) detecting antagonist activity in the sample.

183. (New) A method of screening for a compound that specifically binds to the polypeptide of claim 177, the method comprising:

- a) combining the polypeptide of claim 177 with at least one test compound under suitable conditions, and
- b) detecting binding of the polypeptide of claim 177 to the test compound, thereby identifying a compound that specifically binds to the polypeptide of claim 177.

184. (New) An antibody that specifically binds to a polypeptide comprising an amino acid sequence of SEQ ID NO: 177.